STORM WATER POLLUTION PREVENTION PLAN

FOR THE MIKE MONRONEY

AERONAUTICAL CENTER

OKLAHOMA CITY, OK

Contract No.: DTFA-02-98-D-98018

Prepared for

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August, 2001

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1.0 SUBJECT: PRACTICES AND PROCEDURES FOR STORM WATER POLLUTION PREVENTION

This Storm Water Pollution Prevention Plan (SWPPP[1]) describes storm water management practices and regulatory compliance for the Mike Monroney Aeronautical Center (MMAC) in Oklahoma City, Oklahoma. The MMAC is a support and service facility for the Federal Aviation Administration (FAA) and has served as a logistical center, training facility, supply depot, research center, and aircraft maintenance and modification center since 1946. The facility is located on property leased by the FAA from the Oklahoma City Airport Trust (OCAT) on the west side of, and adjacent to, the Will Rogers World Airport (WRWA) in southwestern Oklahoma City, Oklahoma. The facility includes approximately 1,000 acres of land and at least 54 buildings lining both the east and west sides of South MacArthur Boulevard, between SW 59th Street and SW 89th Street.

2.0 STATUTORY BASIS

The Clean Water Act (CWA) of 1972 sets forth a national objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. To accomplish this goal, the CWA established a comprehensive program that requires a permit for all pollutant discharges. This permitting program is called the National Pollutant Discharge Elimination System (NPDES), or Oklahoma Pollutant Discharge Elimination System (OPDES) as administered by the state of Oklahoma. In 1987, the U.S. Congress added Section 402(p) to the CWA, incorporating storm water discharges from industrial activities under the NPDES program.

3.0 PLAN DISTRIBUTION

This plan will be distributed to all MMAC organizations having specific responsibilities listed herein. In general, this includes organizations conducting industrial activities that may have an impact on storm water quality at the MMAC. At this time, this includes the following: ATCBI,

[1] See Section 8 for list of acronyms and definitions.

Base Maintenance, Cable Yard, CAMI, Hangar 8, Hangar 9, Hangar 10, Line Maintenance, Steel Yard, TSI Lab, and Grounds Maintenance. These facilities and associated organizations are specifically addressed in this Storm Water Pollution Prevention Plan (SWPPP). Throughout this report, these locations are referred to as "identified SWPPP sites." The plan will also be distributed to the Office of Acquisitions (AMQ).

4.0 SCOPE

The scope of this plan is to provide a storm water pollution prevention plan specific to the MMAC facility. The plan is intended to assist in the following:

- Identifying potential pollutant sources;
- Implementing storm water pollution prevention management practices;
- Documenting storm water management practices; and,
- Complying with the Oklahoma Department of Environmental Quality (ODEQ) Multi-Sector General Permit (MSGP) for storm water discharges.

5.0 BACKGROUND

The Multi-Sector General Permit (MSGP) is a storm water OPDES permit promulgated by the ODEQ on October 2, 2000. The MSGP covers storm water discharges from areas with industrial activity during the period of October 2, 2000 to September 28, 2005. The permit is divided into industrial sectors with each sector containing specific provisions.

To obtain "coverage" (authorization to discharge) under the MSGP, a Notice of Intent (NOI) must be submitted by the permittee to the ODEQ. The MMAC facility submitted a NOI in January 2001. Copies of the NOI and Authorization to Discharge are included in Appendix A of this report.

In order to comply with the MSGP, the MMAC must prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). This document serves as the MMAC's SWPPP.

6.0 REGULATORY BASIS

Under the authority of the CWA, the EPA promulgated regulations located in Title 40 Part 122.26 of the *Code of Federal Regulations* (40 CFR 122.26) that require permits for discharges of pollutants from any point source into waters of the United States, including storm water discharges from industrial activities. Also, the *Oklahoma Administrative Code* (OAC) addresses storm water discharges in 252:605-1-5 (c). The OAC states that the provisions and requirements in 40 CFR 122.26 (of 1 July 1993) are incorporated by reference in their entirety to the OAC. The MMAC obtained MSGP coverage under these regulations, following submittal of an NOI and acceptance as a co-permittee with the WRWA. However, the original MSGP issued by EPA expired, and was replaced with the ODEQ MSGP issued October 2, 2000. MMAC has submitted a new NOI to that agency and has obtained coverage under the ODEQ MSGP.

7.0 PURPOSE

The purpose of the SWPPP includes the following:

- Identification of potential pollutant sources that could affect the quality of storm water discharges at the facility;
- Description of practices to be implemented to minimize and control pollutants in storm water discharges associated with industrial activity at the facility; and,
- Compliance with the terms and conditions of the MSGP.

8.0 DEFINITIONS

The following definitions may be beneficial in understanding the permit language used in this storm water plan.

Best Management Practices (BMPs): Scheduled activities, prohibitions of practices, maintenance procedures, and other management practices designed to prevent or reduce the pollution of U.S. waters. BMPs include treatment requirements, operating procedures, and

practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act (CWA): The Federal Statute governing water quality, created to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA includes national effluent limitations, water quality standards, the permit program, special provisions for oil spills and toxic substances, and the Publicly Owned Treatment Works (POTW) construction grant program. The CWA is formally known as the Federal Water Pollution Control Act.

Comprehensive Site Compliance Evaluation (CSCE) Report: An annual report conducted to determine the status of implementation of the SWPPP at MMAC. It must be filed with ODEQ within 60 days of the close of each permit year ending October 2.

Co-permittee: An entity that "shares" a permit with another entity. This may occur when a permit is obtained to cover multiple agencies. For example, a facility with many tenants may obtain a permit and under their permit name their tenants as co-permittees. Co-permittees must comply with the same provisions as permittees.

Drainage Area: A specific surface area that has a common storm water outflow point.

Multi-Sector General Permit (MSGP): A storm water Oklahoma Pollutant Discharge Elimination System (OPDES) permit that covers storm water discharges associated with industrial activity. The permit is divided into industrial sectors and lists specific provisions for each.

Notice of Intent (NOI): A notice that the party identified in the form intends to be authorized, by an OPDES permit, to discharge storm water associated with industrial activity. Filing an NOI obligates the generator to comply with the terms and conditions of the permit.

National Pollutant Discharge Elimination System (NPDES): A permit issued under the authority of the CWA that allows the discharge of specified levels of pollutants to waters of the United States from a point source. The NPDES permit will contain pollutant discharge limits,

monitoring and reporting requirements, and other provisions to ensure that the discharge does not adversely affect water quality or public health.

Oklahoma City Airport Trust (OCAT): The OCAT is the leadership and oversight committee for the Oklahoma City Department of Airports. OCAT leases the buildings and grounds associated with the MMAC to the FAA, and oversees operations of Will Rogers World Airport, Wiley Post Airport and Clarence E. Page Airport.

Oklahoma Pollutant Discharge Elimination System (OPDES): In the past, federal (or NPDES) permits were issued by the United States Environmental Protection Agency (EPA), while state permits were issued by the DEQ. In 1997, the EPA awarded delegation of the NPDES program to the State of Oklahoma. The OPDES system incorporates the federal NPDES requirements by reference, and in their entirety, in Oklahoma Administrative Code (OAC) 252:605-1-5.

Permittee: The entity for which a permit has been applied for and received. The permittee is required to follow specific provisions and requirements described in the permit.

Pollution Prevention Team (PPT): A designated group with the responsibility of maintaining and implementing the Storm Water Pollution Prevention Plan (SWPPP). The team is composed of individuals working at the facility permitted under a Multi-Sector General Permit (MSGP).

Significant Materials: Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finishing materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to the Emergency Planning and Community Right to Know Act (EPCRA) Section 313; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

Storm Water: Storm water runoff, snow melt runoff, and surface runoff and drainage.

Storm Water Pollution Prevention Plan (SWPPP): A written document describing storm water pollution prevention practices at a facility. In particular, the plan identifies pollutant sources, as well as measures and controls used in preventing the sources from impacting the quality of storm water runoff.

Sub-drainage Area: A specific portion of a drainage area. The sub-drainage area is identified to focus on a specific area with activities and pollutant sources that could potentially impact storm water quality.

9.0 RESPONSIBILITIES

Sections 9, 10, and 11 are subdivided into Permit Language and General Compliance sections. The Permit Language sections consist of applicable text directly from Sector S of the MSGP. The General Compliance sections identify activities required for compliance with the MSGP. In addition, Section 11 includes subsections that outline Organization Specific Compliance issues, and actions required for each identified organization.

Specific individuals and their responsibilities related to the SWPPP are described in this and the following sections.

Pollution Prevention Team

Permit Language

You must identify the staff individual(s) (by name or title) that comprise the facility's storm water Pollution Prevention Team. Your Pollution Prevention Team is responsible for assisting the facility/plant manager in developing, implementing, maintaining and revising the facility's SWPPP. Responsibilities of each staff individual on the team must be listed.

General Compliance

The PPT, under the guidance of AMP-100, will be responsible for overseeing the development, implementation, and maintenance of the SWPPP. A portion of the PPT will be responsible for global organization of the SWPPP for the MMAC. These PPT members will be responsible for

management practices such as maintaining/updating records for storm water pollution prevention training, preventive maintenance, and materials inventory; scheduling and executing annual inspections; conducting the Comprehensive Site Compliance Evaluation (CSCE); and implementing Spill Prevention and Response (SPR). Specific individuals who are responsible for the activities shown below are listed in Appendix B.

9.1 PROGRAM DIRECTOR, OFFICE OF FACILITY MANAGEMENT, AMP-1

The Program Director for the Office of Facility Management (AMP-1) is responsible for providing management level coordination by representing the MMAC on the WRWA Pollution Prevention Team, and for approving and signing this SWPPP and other documents required to be submitted to the ODEQ.

9.2 ENVIRONMENTAL, SAFETY AND EMERGENCY MANAGEMENT DIVISION, AMP-100

The Environmental, Safety and Emergency Management Division (AMP-100) is responsible for the following:

a. Executing, managing, and maintaining documentation in the SWPPP for training as described in Section 11.3.2.7.

b. Documenting spills and leaks and updating the SWPPP as described in Section 11.3.1.3.

c. Recording and modifying the SWPPP to include all maintenance activities as described in section 11.3.2.2.

d. Recording and modifying the SWPPP to include all materials inventory reports as described in section 11.3.1.1.

e. Managing, scheduling, and documenting annual and quarterly inspections as described in Sections 11.3.2.6. and 11.3.4.

f. Placing updated maps into the SWPPP provided to it by organizational PPT members.

g. Initiating, managing, and documenting the Comprehensive Site Compliance Evaluation in the SWPPP as described in Section 10.0.

9.3 OFFICE OF ACQUISITIONS, AMQ-1

The Office of Acquisitions (AMQ-1) is responsible for ensuring that contracts for on-site contractors contain language requiring compliance with this SWPPP. The AMQ liaison for these responsibilities is shown in Appendix B.

9.4 ORGANIZATIONS RESPONSIBLE FOR IDENTIFIED SWPPP SITES

Organization representatives associated with the respective identified SWPPP sites are listed in Appendix B. In general, these representatives are responsible for managing implementation and maintenance of the SWPPP for their respective organizational area.

10.0 WRITTEN PROGRAM - COMPREHENSIVE SITE COMPLIANCE EVALUATION

Permit Language

All industrial facilities receiving authorization to discharge storm water must conduct an Annual Comprehensive Site Compliance Evaluation and file a Report. This report summarizes the scope of the inspections, name(s) of personnel making the inspections, the date(s) of the inspections, and major observations relating to the implementation of the SWPPP.

General Compliance

The Comprehensive Site Compliance Evaluation (CSCE) will be performed annually. The MSGP states that deicing and anti-icing activities should define the timing of a CSCE. However, flight operations out of the MMAC are not time critical and are postponed or canceled in the event of bad weather. Therefore, no deicing or anti-icing activities occur at the facility and the evaluation can be performed at any time during the year.

The CSCE will include visual inspections, evaluations, and observations. Based on conclusions from these activities, revisions will be made to the SWPPP. Also, a written report summarizing the scope of the evaluation, personnel making the evaluation, dates of the evaluation, major observations relating to the implementation of the storm water pollution prevention plan, and

incidents of noncompliance will be completed. AMP-100 is responsible for initiating and managing the CSCE is identified in Table 9-1. CSCE reports will be placed in Appendix C.

Inspections of the facility will be performed during the annual CSCE. This will include inspecting equipment storage and maintenance areas (inside and outside), fueling areas, materials handling areas, above ground storage tanks (ASTs), and all other areas of the facility with activities that may impact storm water as defined under the MSGP (See Subsection 11.1). The checklist shown in Appendix C will be used to perform these inspections. Follow-up will be performed to ensure appropriate actions are taken in response to the inspections. All identified SWPPP sites (see Section 11.1.1) will be inspected. The respective PPT member (see Appendix B) will coordinate the performance of inspections for each identified organizational area and report the inspection results to AMP-100. It is suggested that the annual inspection be conducted in conjunction with the annual hazardous material/petroleum product storage site inspection required by AC Order 1050.4.

11.0 SWPPP PROVISIONS

11.1 EXPLANATION OF SECTOR IDENTIFICATION

The MSGP is organized into sectors based on industrial activities, with each sector having specific compliance requirements. Based on site inspections conducted at the MMAC (see Appendix D) and permit language review, two industrial sectors, Sector S, related to airports and airport support facilities, and Sector AB, related to Transportation Equipment, Industrial or Commercial Machinery, were identified. This conclusion is justified in the following discussion.

Exposed industrial activities that occur at the MMAC were identified as Sector S activities. Sector S includes storm water discharges associated with industrial activity from vehicle maintenance areas, equipment-cleaning areas, or deicing areas located at air transportation facilities. Specific industrial activities defined in this sector include airports, air terminals, air carriers, flying fields, and establishments engaged in servicing or maintaining airports and/or aircraft deicing/anti-icing operations that have vehicle maintenance shops, material handling facilities, equipment cleaning operations, or airport and/or aircraft deicing/anti-icing operations.

Applicable Sector AB activities include industrial plant yards, material handling sites, shipping and receiving areas, and manufacturing buildings.

Sector identification of the Hazardous Waste Storage Building was investigated, particularly the applicability of Sector K. Sector K addresses storm water discharges associated with industrial activity from hazardous waste treatment, storage, or disposal facilities. The MMAC is classified as a large quantity hazardous waste generator with EPA ID No. OKO690540000. The storage facility is used to store waste for less than 90 days. EPA comments on the proposed MSGP specifically questioned the applicability of Sector K to hazardous waste generators that operate storage areas with less than 90-day accumulation or temporary satellite accumulation areas. EPA responded that Sector K did not include generators who temporarily store hazardous waste. Furthermore, the MSGP only applies to industrial activities that are exposed to storm water. The only circumstances under which materials can potentially be exposed to storm water at the Hazardous Waste Storage Building occur when materials are loaded and unloaded from the facility. Based on these comments, Sector K classification does not apply to the Hazardous Waste Storage Building.

Proper classification of the Industrial Wastewater Pretreatment facility was also evaluated. Sector T of the MSGP specifically includes these facilities. However, the treatment facility is completely enclosed in a building preventing any exposure to storm water. As stated previously, the MSGP only applies to industrial activities that are exposed to storm water; therefore, Sector T classification does not apply to the Industrial Waste Treatment Plant.

11.1.1 Defined Sub-Drainage Areas

The MMAC facility is divided into four large drainage areas. Much of the property leased by the FAA from the OCAT, primarily the western and southern extremes, is undeveloped pasture, with no industrial activity. Industrial activities that do occur sporadically throughout the four large drainage areas are concentrated around the campus area, along MacArthur Blvd. Therefore, areas where industrial activities occur were addressed as sub-drainage areas. The following sub-drainage areas have been identified at the MMAC:

- **ATCBI and Antenna Systems Branch** – Outdoor storage facility

- **Base Maintenance** - Vehicle maintenance, equipment cleaning, and material handling facility
- **Cable Yard/Logistics Center**- Material handling and outdoor storage facility
- **CAMI** - Material handling and outdoor storage facility
- **Grounds Maintenance** – Staging facility for grounds maintenance activities.
- **Hangar 8** - Aircraft maintenance and materials handling facility
- **Hangar 9** - Aircraft maintenance, aircraft painting, and materials handling facility
- **Hangar 10** – Aircraft storage, maintenance, refueling, contractor facility
- **Line Maintenance** - Vehicle maintenance, equipment cleaning, and material handling facility
- **Steel Yard** - Material handling and outdoor storage facility
- **TSI Lab** – Training facility, storage of wrecked aircraft, cars

The locations listed above are referred to as "identified SWPP sites" throughout the SWPPP.

11.2 TENANT FACILITIES

The MMAC has tenant and contractor facilities on its property, which shall participate under this SWPPP. Tenant and contractor facilities are responsible for storm water management in their respective areas. The MMAC may address this issue using Memorandums of Agreement or by modifying future leases and contracts to require compliance with SWPPP provisions. A list of tenant facilities is found in Appendix E.

11.3 SECTOR S STORM WATER POLLUTION PREVENTION PLAN

11.3.1 Description of Potential Pollutant Sources

11.3.1.1 Inventory of Exposed Materials

Permit Language

You must identify each separate area at your facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description must include:

- ***Activities in area****. A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steal beams); and*

- ***Pollutants****. A list of the associated pollutant(s) or pollutant parameter(s) (e.g., crankcase oil, used motor oil, iron, biochemical oxygen demand, pH, etc.) for each activity. The pollutant list must include all known significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three (3) years prior to the date of the submission of a Notice of Intent.*

Include in your inventory of exposed materials a description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps).

General Compliance

A materials inventory, which requires personnel to maintain current records, increases the awareness of exposed materials within an organizational area, and provides an up-to-date listing that can be referenced during an emergency. The materials inventory identifies materials that have been handled, treated, stored, or disposed in a way that has allowed them possible contact with storm water. The inventory includes the method and location of on-site storage or disposal, the management practices employed to minimize contact of materials with storm water, and the locations and description of existing structural and nonstructural controls.

The materials inventory does not include materials stored indoors. However, potential for exposure to storm water exists during loading and unloading. Spills, leaks, accidents, or other occurrences during unloading and loading materials should be reported to the appropriate PPT member.

The inventory of exposed materials will be updated annually by each organization in accordance with AC Order 1050.4. This order identifies the reportable spill quantity, type of secondary containment, probable spill route, spill contingency plan, visual inspection instructions, preventative maintenance activities, and housekeeping activities related to each substance. The PPT members identified in Appendix B will be responsible for updating inventories from their respective organizational areas annually. These updates will be reported to AMP-100, who will update the SWPPP as necessary. The current inventory of exposed materials is found in Appendix F, as well as structural and nonstructural control measures for pollution prevention.

Storm water at the MMAC currently drains to the outlet lagoon without treatment.

11.3.1.2 Drainage

Permit Language

In addition to information listed in the general drainage section, Identify where any of the following may be exposed to storm water / surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance / cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

Identify where any of the following may be exposed to storm water / surface runoff: vents and stacks from metal processing and similar operations.

General Compliance

Drainage maps for each of the identified SWPPP sites are located in Appendix G. Site maps will be updated accordingly when changes occur at a site that can affect storm water drainage, exposed industrial activities, or potential pollutant sources. Whenever the maps receive modification, the SWPPP will be updated to reflect the changes. The PPT member from each

identified organization is responsible notifying AMP-100 whenever changes have occurred which warrant revising the maps. The area drained and percent impervious cover for each outfall is shown in Table 11-1. Significant areas of the MMAC are mostly pastureland and do not receive industrial runoff. These areas are not included in Table 11-1.

Table 11-1
Outfall Drainage Areas

Outfall	Acres Drained	Percent Impervious Cover
1	351	22.6
2	53	57.9
3	21	92.0
4	76	76.0

11.3.1.3 Spills and Leaks

Permit Language

You must clearly identify areas where potential spills and leaks, which can contribute pollutants to storm water discharges, can occur, and their accompanying drainage points. You must provide a list of significant spills and leaks of toxic or hazardous pollutants that occurred at areas that are exposed to storm water or that otherwise drain to a storm water conveyance at the facility after the date of three (3) years prior to the date of the submission of a Notice of Intent (NOI) to be covered under this permit. Your list must be updated if significant spills or leaks occur in exposed areas of your facility during the time you are covered by the permit.

Significant spills and leaks include, but are not limited to releases of oil or hazardous substances in excess of quantities that are reportable under CWA §311 (see 40 CFR 110.10 and 40 CFR 117.3) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements.

General Compliance

The descriptions of spills and leaks are located in Appendix H. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the CERCLA (see 40 CFR 302.4).

A description of the cause of spills or leaks that occur, of the actions taken to respond to each release, and of the preventative measures taken to prevent future similar incidences will be reported to AMP-100 in accordance with AC Order 1050.4. AMP-100 will update the SWPPP as necessary.

11.3.1.4 Risk Identification and Summary of Potential Pollutant Sources

Permit Language

You must identify each separate area at your facility where industrial materials or activities are exposed to storm water. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description must include:

- ***Activities in area****. A list of the activities (e.g., material storage, equipment fueling and cleaning, cutting steal beams); and*

- ***Pollutants****. A list of the associated pollutant(s) or pollutant parameter(s) (e.g., crankcase oil, used motor oil, iron, biochemical oxygen demand, pH, etc.) for each activity. The pollutant list must include all known significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of three (3) years prior to the date of the submission of a Notice of Intent.*

General Compliance

Potential pollutant sources are identified and described for each identified organizational area in Appendix I. The description includes the pollutant, source, existing structural controls, and storm water impact. This list will be updated annually by each organization during annual site inspections. The appropriate PPT member, as identified in Appendix B, will be responsible for the implementation of annual site inspections.

11.3.2 Best Management Practices (BMPs)

Upon completion of the source identification and assessment phase, the permit requires the permittee to evaluate, select, and describe pollution prevention measures and controls (or BMPs) that will be implemented at the facility.

11.3.2.1 Good Housekeeping

Permit Language

Good Housekeeping: You must keep all exposed areas of the facility in a clean, orderly manner where such exposed areas could contribute pollutants to storm water discharges. Common problem areas include: around trash containers, storage areas and loading docks. Measures must also include: a schedule for regular pickup and disposal of garbage and waste materials, routine inspections for leaks and conditions of drums, tanks and containers.

- ***Aircraft, Ground Vehicle and Equipment Maintenance Areas.***

Describe and implement measures that prevent or minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.

- ***Aircraft, Ground Vehicle and Equipment Cleaning Areas****.*

Clean equipment only in the areas identified in the SWP3 and site map and clearly demarcate these areas on the ground. Describe and implement measures that prevent or minimize the contamination of storm water runoff from cleaning areas.

- ***Aircraft, Ground Vehicle and Equipment Storage Areas.***

Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only. Consider the following BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

- ***Material Storage Areas.***

Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Describe and implement measures that prevent or minimize contamination of storm water / runoff from these areas. Consider the following BMPs (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms / dikes around storage areas.

- ***Airport Fuel System and Fueling Area**s.*

Describe and implement measures that prevent or minimize the discharge of fuel to the storm sewer / surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following BMPs (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting storm water runoff.

General Compliance

Good housekeeping practices reduce exposure of pollutants and potential pollutant sources to precipitation. The following good housekeeping practices are currently (and will continue to be) implemented at all identified SWPP sites:

- Maintenance activities are performed indoors;
- Materials inventory is kept of materials used;
- Waste materials are stored in centralized areas;
- All inlet drains inside structures where industrial activities occur are connected to the MMAC Industrial Wastewater Pre-treatment Facility and/or the sanitary sewer;
- Dry cleanup methods are employed;
- Used absorbent materials are promptly collected and disposed;
- Cigarette containers are placed and maintained at locations where smokers are likely to congregate; and,
- Oil and Hazardous Substances are maintained in a clean orderly state and are segregated.

Organization PPT members (see Appendix B) will oversee and verify continued implementation of good housekeeping practices in their respective organizational areas.

The following good housekeeping management practices are not currently implemented at identified SWPP sites. PPT members for each identified SWPP Site will be responsible for implementing these practices within 60 days of final promulgation of this plan.

- Dumpster lids and side panels will be kept closed;
- Litter inspections and litter pickup will be performed regularly;
- Used or excess materials stored outdoors will be disposed of or properly removed from the site; and,
- Liquid materials will not be loaded or unloaded during storm events. This excludes aircraft fueling performed under an FAA approved program.

Organization Specific Compliance

In addition to the good housekeeping BMPs mentioned in General Compliance, good housekeeping BMPs were identified that are specific to each organizational area. In the Tables below, management practices that promote good housekeeping are listed by identified organizational area. For each management practice, notation is made indicating whether it is currently implemented. If the practice is not currently in place, the appropriate organization, through its PPT member, will be responsible for implementing it as soon as practicable. If the practice cannot be implemented within 60 days of the final promulgation of this plan, the organization PPT shall notify AMP-100 with a proposed implementation schedule. The implementation schedule will subsequently become a part of this SWPPP.

Table 11- 2
ATCBI and Antenna Systems Branch

Good Housekeeping Practices	Currently Implemented	Implementation Date
Exposed drums of oil will be stored (while on-site) in a covered area with secondary containment.		60 days after final SWPPP promulgation

Table 11- 3
Base Maintenance

Good Housekeeping Practices	Currently Implemented	Implementation Date
Vehicle cleaning operations are performed indoors preventing washwater from entering storm drains.	**YES**	
Materials (waste paints, oils, and solvents) located outdoors are stored under covered areas preventing exposure to storm water	**YES**	
Drummed materials are stored under covered areas with secondary containment.	**YES**	
Materials in gas canisters are stored under covered areas.	**YES**	

Table 11-3 Continued
Base Maintenance

Good Housekeeping Practices	Currently Implemented	Implementation Date
Outdoor covered storage or tarps will be employed to prevent exposed materials from contacting storm water when feasible.		60 days after final SWPPP promulgation
Absorbent materials will be located where vehicle maintenance and/or storage is performed under outdoor covered areas.		60 days after final SWPPP promulgation

Table 11- 4
Cable Yard/Logistics Center

Good Housekeeping Practices	Currently Implemented	Implementation Date
Materials in gas canisters are stored under covered areas.	**YES**	
Exposed drums of waste antifreeze, waste blasting sand, and waste soap will be stored (while on-site) in a covered area with secondary containment.		60 days after final SWPPP promulgation

Table 11- 5
CAMI

Good Housekeeping Practices	Currently Implemented	Implementation Date
Materials in gas canisters are stored under covered areas.	**YES**	
Exposed, non-sealed drums of sand blasting waste will be placed in a sealed drum and will be stored (while on-site) in a covered area with secondary containment.		60 days after final SWPPP promulgation
Exposed paints will be stored (while on-site) in a covered area with secondary containment.		60 days after final SWPPP promulgation

Table 11- 6
Hangar 8

Good Housekeeping Practices	Currently Implemented	Implementation Date
Aircraft are stored indoors.	**YES**	
Aircraft maintenance and washing is performed indoors and washwater and other liquids from these activities do not impact storm water.	**YES**	
Materials in gas canisters are stored under covered areas.	**YES**	
Absorbent materials will be stored near airplane fueling areas.		60 days after final SWPPP promulgation

Table 11- 7
Hangar 9

Good Housekeeping Practices	Currently Implemented	Implementation Date
Aircraft are stored indoors.	**YES**	
Aircraft maintenance and washing is performed indoors and wash water or other liquids from these activities do not impact storm water.	**YES**	

Table 11- 8
Hangar 10

Good Housekeeping Practices	Currently Implemented	Implementation Date
Aircraft are stored indoors.	**YES**	
Aircraft maintenance and washing is performed indoors and wash water or other liquids from these activities do not impact storm water.	**YES**	

Table 11- 9
Line Maintenance

Good Housekeeping Practices	Currently Implemented	Implementation Date
Some materials (solvent, fuel, and oil) located outdoors are stored under covered areas preventing exposure to storm water.	**YES**	
Drummed materials are stored under covered areas with secondary containment.	**YES**	
Absorbent materials will be stored at the fueling pumps.		60 days after final SWPPP promulgation
Vehicle washing will be performed indoors, if feasible, so that wash water does not enter the storm water drains.		60 days after final SWPPP promu lgation

Table 11- 10
Steel Yard

Good Housekeeping Practices	Currently Implemented	Implementation Date
None currently identified.		

Table 11- 11
TSI Lab

Good Housekeeping Practices	Currently Implemented	Implementation Date
None currently identified.		

Table 11- 12
Grounds Maintenance

Good Housekeeping Practices	Currently Implemented	Implementation Date
AST's for refueling have secondary containment	YES	
Vehicle washing will be performed indoors, if feasible, so that wash water does not enter the storm water drains.	YES	
Mulch and soil piles located in covered sheds	YES	

11.3.2.2 Preventive Maintenance

Permit Language

Preventive Maintenance: You must have a preventive maintenance program which includes timely inspection and maintenance of storm water management devices, (e.g., cleaning oil/water separators, catch basins) as well as inspecting, testing, maintaining and repairing facility equipment and systems to avoid breakdowns or failures that may result in discharges of pollutants to surface waters.

General Compliance

Preventive maintenance practices reduce the risk of pollutant exposure to storm water and of offsite discharges. The following preventive maintenance practices are currently and will continue to be implemented at all identified SWPP sites:

- Storm water management controls are regularly inspected and maintained. This includes cleaning debris from drain inlets, inspecting drain inlets for repair needs, and clearing drainage pipes with blocked flow.
- Materials stored on-site are regularly inspected for chemical identification, integrity of secondary containment, and signs of material losses.
- Areas with leak or spill potential are identified and practices are implemented that reduce these potential risks (such as easily accessible absorbent materials and "pigs").
- Activities such as routine stock rotation, disposal of waste oils to redistribution and marketing unit (AML-1040), checking for leaks in compressed gas cylinders when first installed and periodically thereafter, and managing hazardous waste per 40 CFR 265 Subpart I are implemented for oil and hazardous waste materials.

Organizations having SWPPP responsibilities will perform regular maintenance inspections. The inspections will be reviewed by the organization's PPT member who will also evaluate the effectiveness of management practices preventing pollutants from entering storm water for each identified organization. Based on these evaluations, the PPT will make appropriate recommendations and notify AMP-100 of any changes in preventive maintenance activities. Maintenance activities and recommendations will be documented and placed in Appendix J.

11.3.2.3 Spill Prevention and Response Procedures

Permit Language

Spill Prevention and Response Procedures: You must describe the procedures that will be followed for cleaning up spills or leaks. Those procedures, and necessary spill response equipment, must be made available to those employees that may cause or detect a spill or leak. Where appropriate, you must explain existing or planned material handling procedures, storage requirements, secondary containment, and equipment (e.g., diversion valves), which are intended to minimize spills or leaks at the facility. Measures for cleaning up hazardous material spills or leaks must be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265 as adopted by reference in OAC 252:605-3-2 (F) and (G).

General Compliance

The Spill Prevention and Response Plan (SPR Plan, AC Order 1050.4), completed by the MMAC in November 1990, includes general information; plan implementation; a spill prevention, control, and countermeasures (SPCC) plan; and an oil and hazardous substance contingency plan. An SPR provides a detailed plan of action to minimize spill impacts. All organizations will follow plan procedures when a spill occurs. Questions regarding spills should be addressed to AMP-100.

11.3.2.4 Source Reduction

Permit Language

Consider alternatives to the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used and / or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous sodium acetate.

General Compliance

The MMAC does not currently perform deicing/anti-icing and, therefore, has no source reduction responsibilities under Sector S of the MSGP.

11.3.2.5 Management of Runoff

Permit Language

*Management of Runoff**:** You must describe the traditional storm water management practices (permanent structural BMPs other than those which control the generation or source(s) of pollutants) that currently exist or that are planned for your facility. These types of BMPs typically are used to divert, infiltrate, reuse, or otherwise reduce pollutants in storm water discharges from the site. All BMPs that you determine are reasonable and appropriate, or are required by a local authority; or are necessary to maintain eligibility for the permit (see Part 1.2.5 - Limitations on Coverage) must be implemented and maintained. Factors to consider when you are selecting appropriate BMPs should include: 1) the industrial materials and activities that are exposed to storm water, and the associated pollutant potential of those materials and activities; and 2) the beneficial and potential detrimental effects on surface water quality, ground water quality, receiving water base flow (dry weather stream flow), and physical integrity of receiving waters. Structural measures should be placed on upland soils, avoiding wetlands and floodplains, if possible. Structural BMPs may require a separate permit under Section 404 of the CWA before installation begins.*

Example BMPs: BMPs you could use include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).

General Compliance

Runoff management practices reduce storm water exposure to potential pollutants and prevent flooding. The following runoff management practices are currently and will continue to be implemented at all identified SWPP sites:

- Storm water flow is diverged into channels and ditches to limit contact of storm water with potential pollutants;
- Vegetative areas are used to facilitate infiltration and filtration of storm water; and,
- Silt fences are implemented around drain inlets near construction areas to filter sediment from storm water runoff.

Drainages are identified on maps in Appendix G. The PPT member (see Appendix B) for each organizational area is responsible for the implementation and maintenance of the storm water runoff management activities identified above.

11.3.2.6 Inspections

Permit Language

In addition to or as part of the Comprehensive Site Evaluation Report required under Part 4.8, you must have qualified facility personnel inspect all areas of the facility where industrial materials or activities are exposed to storm water. The inspections must include an evaluation of existing storm water BMPs. Your SWPPP must identify how often these inspections will be conducted. You must correct any deficiencies in implementation of your SWPPP you find as soon as practicable, but not later than within 14 days of the inspection. You must document in your SWPPP the results of your inspections and the corrective actions you took in response to any deficiencies or opportunities for improvement that you identify.

General Compliance

Inspections monitor facilities and activities to ensure compliance with SWPPP practices. These inspections will be performed as part of the CSCE (see Section 10.0).

11.3.2.7 Pollution Prevention Training

Permit Language

You must describe the storm water employee training program for the facility. The description should include the topics to be covered, such as spill response; good housekeeping and material management practices, and must identify periodic dates (e.g., every 6 months during the months of July and January) for such training. You must provide employee training for all employees that work in areas where industrial materials or activities are exposed to storm water, and for employees that are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance people). The employee training should inform them of the components and goals of your SWPPP.

General Compliance

Training educates personnel about practices that improve storm water quality. Organizations with industrial activities, as identified in this SWPPP, will ensure that new employees having duties related to the implementation of this plan receive training within six months of being assigned to their position and that all employees having SWPPP implementation responsibilities receive refresher training every three years. It is the responsibility of the organization's PPT member to inform AMP-100 of the names of all employees having SWPPP responsibilities, including new employees, so that training can be scheduled as appropriate. AMP-100 is responsible for providing storm water pollution prevention training as required or requested by PPT members. Training will include, but is not limited to, the following topics: spill response, good housekeeping, and best management practices. Additionally, records of storm water training are located in Appendix K.

11.3.2.8 Non-storm Water Discharges

Permit Language

Your SWPPP must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-storm water. The certification must be signed in accordance with Part 8.7 of this permit, and include:

- *the date of any testing and/or evaluation;*
- *identification of potential significant sources of non-storm water at the site;*
- *a description of the results of any test and/or evaluation for the presence of non-storm water discharges;*
- *a description of the evaluation criteria or testing method used; and*
- *a list of the outfalls or onsite drainage points that were directly observed during the test.*

General Compliance

Non-Storm water discharges were chemically and volumetrically quantified as part of an investigation in support of the MMAC's individual OPDES Permit application. The report of findings from this investigation, titled "Additional Data Report and Addendum to Oklahoma Pollutant Discharge Elimination System Permit Application," completed for the MMAC in December 1999, is attached as Appendix L. The current OPDES permit application and addendum for the facility is located in Appendix M.

11.3.2.9 Sediment and Erosion Control

Permit Language

You must identify the areas at your facility which, due to topography, land disturbance (e.g., construction), or other factors, have a potential for significant soil erosion. You must describe the structural, vegetative, and/or stabilization BMPs that you will be implementing to limit erosion.

General Compliance

Sediment and erosion control practices reduce sediment in storm water runoff. The following sediment and erosion control practices are currently, and will continue to be, implemented at all identified SWPP sites:

- Vegetative strips are located around facility buildings providing infiltration and filtering of storm water;
- Concrete surfaces cover all areas where industrial activities occur preventing soil and sediment from entering runoff and spill and leaks from contacting the soil; and,
- Silt fences are installed around construction sites to control sediment runoff.

The respective PPT member (Appendix B) will maintain the sediment and erosion control activities identified above for each identified organization.

11.3.3 Monitoring and Reporting Requirements

Permit Language

You must perform and document a quarterly visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The visual examination must be made during daylight hours (e.g., normal working hours). If no storm event resulted in runoff from the facility during a monitoring quarter, you are excused from visual monitoring for that quarter provided you document in your monitoring records that no runoff occurred. You must sign and certify the documentation in accordance with Part 8.7.

Your visual examinations must be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from your facility. The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. The examination must be conducted in a well-lighted area. No analytical tests are required to be performed on the samples. All such samples must be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1

inch rainfall) storm event. Where practicable, the same individual should carry out the collection and examination of discharges for the entire permit term.

General Compliance

There are no monitoring and reporting requirements for this facility related to deicing/anti-icing activities. Visual monitoring of the MMAC outfalls and the associated outlet lagoon is conducted by AMP-100 on a quarterly basis, after rainfall events of 0.10 inch or greater, and after significant snowmelts. The outfalls and lagoon are inspected for oily sheen and signs of other releases or pollution. Visual inspection results are included in Appendix N. Site specific monitoring requirements for dry weather discharges are required by the ODEQ under the provisions of the MMAC OPDES permit (OK0043931).

12.0 ENDANGERED SPECIES DETERMINATION

Permit Language

Your SWPPP must include documentation supporting your determination of permit eligibility with regard to Part 1.2.5 (Endangered Species).

General Compliance

The U.S. Army Corps of Engineers (USACE) conducted a protected species survey at MMAC in 1998. A report[2] prepared by USACE says, "Surveys performed in January and April 1998 to identify resident wildlife (including listed species) indicated a primarily "tolerant" or opportunistic fauna and did not indicate the presence of any listed species. Interpretation of collected data indicates that lands on the MMAC are intensively disturbed, low in plant species diversity, and do not possess the quality wildlife habitat necessary to support sensitive species such as Federal and State-listed species."

[2] "Protected Species Surveys, Mike Monroney Aeronautical Center, Federal Aviation Administration, Oklahoma City, Oklahoma", U. S. Army Corps of Engineers, Tulsa District, Tulsa, Oklahoma, July 1998

Most of the storm water drainage at MMAC flows into the Canadian River. This watershed is identified in Exhibit 1 of the MSGP as an Aquatic Resource of Concern. As such, MMAC agrees to abide by the following MSGP conditions:

- Pollutants such as, oil, grease, solid waste, human waste, hazardous or toxic material, or other material not authorized for discharge under this permit must be properly captured, treated, and correctly disposed of. These potential pollutants must be properly managed and their contact with storm water minimized or eliminated to the greatest extent practicable.

- A schedule must be included which describes the inspection practices that will be used to ensure that control measures are working effectively. - MMAC will conduct comprehensive site compliance evaluations annually.

- Hazardous materials and production waste products must be stored in a manner that minimizes their contact with storm water. An emergency response plan must be included which addresses the handling of accidental spills or leaks. – See Section 11.3.2.3. for a description of spill response procedure documentation.

13.0 COPY OF PERMIT REQUIREMENTS

Much of the MSGP has been excerpted as part of this SWPPP. A copy of the general sections and sectors S and AB can be found in Appendix O. It can also be viewed electronically at http://www.deq.state.ok.us/Water1/stormwater/gp-00-01.pdf .

14.0 SIGNATURE

This plan is signed in accordance with sections 4.10.1 and 8.7 of the MSGP.

Original Signed by Charles T. Sullivan _____09/14/01_____

Charles T. Sullivan Date

Program Director, Facility Management